

Strategies Of College English Curriculum Design Based on Content and Language Integrated Learning (CLIL)

Haishan Liu

Beijing Normal-Hong Kong Baptist University (BNBU), Zhuhai, 519087, China

473708730@qq.com

Abstract. In China's higher education system, English language teaching has traditionally prioritized language proficiency, often overlooking the integration of academic content. As global demands for both language competence and specialized knowledge grow, this study investigates the implementation of Content and Language Integrated Learning (CLIL) in Chinese universities. Using thematic analysis of secondary data, the research identifies critical challenges such as curriculum integration, teacher readiness, resource constraints, and institutional resistance. The findings show that while CLIL offers potential benefits in enhancing both language skills and subject knowledge, its effectiveness is hindered by insufficient teacher training and a lack of resources. The aim of this paper is to explore these challenges and provide practical recommendations for successfully integrating CLIL in Chinese higher education. The study concludes by emphasizing the importance of teacher development, resource allocation, and institutional support for effective CLIL implementation, and suggests directions for future research.

Keywords: Content and Language Integrated Learning (CLIL), Higher Education, Curriculum Integration, Educational Reform, Resource Allocation.

1. Introduction

In China, English has traditionally been taught as a foreign language with a strong emphasis on language proficiency, focusing primarily on grammar and vocabulary [1][2]. While this approach has been effective in building foundational language skills, it often overlooks the integration of academic content. As a result, students frequently struggle to apply their language skills in real-world academic and professional settings. In light of globalization and China's growing role in the global economy, there is an increasing demand for a more comprehensive approach to language education. This shift not only calls for mastery of the language but also requires students to acquire relevant subject knowledge that prepares them for academic and professional challenges [3].

One educational strategy that has gained considerable attention in addressing this gap is Content and Language Integrated Learning (CLIL). CLIL is a dual-focused approach that combines content and language instruction, improving students' language proficiency while deepening their understanding of academic subjects. This method helps students apply their language skills to real-world situations, better preparing them for future professional endeavors. In China's higher education system, CLIL offers a valuable opportunity to bridge the gap between language learning and content comprehension, equipping students with both language skills and subject-specific knowledge crucial for success in a globalized world [4][5].

In the context of Chinese higher education, CLIL has proven to be an effective strategy for bridging the gap between language acquisition and subject comprehension [1][4]. It is particularly relevant for college English programs, which have often placed more focus on grammar and vocabulary rather than integrating language with specific academic subjects. The adoption of CLIL offers an opportunity to make the learning experience more engaging, relevant, and aligned with the needs of today's academic and professional environments. The aim of this paper is to explore the strategies involved in designing and implementing a CLIL-based college English curriculum in China, focusing on curriculum integration, teacher training, and the development of appropriate learning materials. The study will also examine the benefits and challenges of CLIL, providing insight into how this approach can be effectively integrated into China's higher education system.

The research objective of this study is to assess the key strategies for successful CLIL implementation, addressing pedagogical challenges and proposing solutions. By understanding how CLIL is practically applied in China's college English programs, this research aims to inform the development of curricula that align with global language proficiency standards and academic content knowledge. Ultimately, this study seeks to help students thrive in an increasingly interconnected world. Additionally, it aims to identify barriers to the successful integration of CLIL, such as teacher training and curriculum design issues, offering actionable recommendations to address these obstacles. Therefore, this study will provide valuable insights into the strategies and challenges of implementing CLIL in China's college English curriculum. By investigating these aspects, the paper aims to offer practical recommendations to help educators, curriculum developers, and policymakers improve the quality of English education, preparing students for the demands of a globalized society.

2. Literature Review

The concept of Content and Language Integrated Learning (CLIL) has garnered significant attention in educational research, with a growing body of literature supporting its effectiveness in improving both language skills and content knowledge. CLIL fosters a dynamic learning environment, where students actively engage with both language and content, rather than passively receiving linguistic knowledge. This dual-focused approach aligns with the need to prepare graduates who are not only proficient in English but also knowledgeable in their specific fields of study [6].

In China, the increasing emphasis on internationalization and the need for students to communicate effectively in English within global contexts has made CLIL particularly relevant [7]. The integration of foreign language skills with academic content in fields such as business, engineering, and medicine is considered essential in equipping students for global careers. Numerous studies have examined the effectiveness of CLIL in various academic disciplines, particularly in improving English proficiency. For instance, research by Rong and Nair (2021) [8] demonstrated that CLIL enhanced students' writing skills in business English, providing them with real-world contexts for language use. Similarly, Huang & Wu (2022) [6] found that CLIL classrooms in China not only improved language proficiency but also enhanced cognitive abilities and content knowledge, as students were required to interact with both the language and the subject matter.

Despite its potential benefits, the implementation of CLIL in China's college English curricula is not without challenges. One significant obstacle is the lack of adequately trained teachers who are capable of delivering content in English [4]. Many teachers lack subject-specific knowledge and the pedagogical expertise required to teach content through a foreign language. Additionally, there is a need for substantial curriculum reform to effectively integrate language and content instruction. According to Hu & Gao (2021), curriculum designers must ensure that the content taught aligns with students' future career goals and is appropriately challenging for their language proficiency levels. Another challenge lies in the adaptation of teaching materials. Traditional English textbooks often focus exclusively on language skills, neglecting the content knowledge needed for CLIL. To address this, educators must develop materials that integrate both language and subject-specific content. Additionally, classroom activities should be designed to encourage active student participation, collaboration, and independent learning. Research suggest that integrating task-based learning activities into CLIL classrooms can enhance student motivation and facilitate the retention of both language and subject knowledge [9].

Despite the growing body of research on Content and Language Integrated Learning (CLIL), there remains a significant gap in the literature regarding its specific application within China's higher education system. While many studies have focused on CLIL's integration into English language teaching, there is a lack of exploration into its application in specialized disciplines such as business, engineering, and science, where both content mastery and language proficiency are critical. Additionally, much of the existing research has concentrated on urban or developed regions, leaving little attention to the unique challenges faced by educators in non-urban or underdeveloped areas

where resources and teacher expertise may be limited. This paper aims to fill these gaps by examining the strategies for implementing CLIL across diverse academic disciplines in China and exploring the challenges faced by educators in both urban and non-urban settings, ultimately contributing to a more comprehensive understanding of how CLIL can be effectively applied across China's varied educational contexts

3. Research Methodology

This study employs a qualitative research design focused on secondary data collection to investigate the strategies and challenges associated with implementing Content and Language Integrated Learning (CLIL) in China's higher education system. Secondary data, including published academic articles, policy documents, reports, and educational resources, are utilized to gain insights into the application and effectiveness of CLIL across various academic disciplines, such as business, engineering, and science [1] [7]. The use of secondary data is beneficial for this research as it allows for an extensive exploration of the topic, leveraging existing studies to build a comprehensive understanding without the need for primary data collection, saving both time and resources.

Data Collection involves systematically reviewing relevant secondary sources from well-established academic databases like Elsevier, Wiley, and Emerald. The focus is on studies that investigate the integration of CLIL in higher education, with particular attention given to both its application in China and its international use in various disciplines. Additionally, government publications and policy documents that outline frameworks and initiatives for bilingual education and CLIL in China are also incorporated to provide a broader contextual understanding [4]. The collected data consists of empirical studies, case studies, literature reviews, and policy-related documents that shed light on the implementation of CLIL and its impact on students' academic and language outcomes.

Data Analysis for this research will involve thematic analysis, a technique that allows for the identification of key themes, patterns, and challenges across the secondary data sources. Thematic analysis is ideal for this research as it helps to systematically categorize recurring issues, strategies, and best practices associated with CLIL implementation [10]. By grouping the data into meaningful themes, this analysis will provide valuable insights into the adoption of CLIL in China's higher education institutions, while also addressing the challenges faced by educators and students in applying this innovative approach.

4. Analysis and Discussion

This study employed thematic analysis to examine secondary data regarding the implementation of Content and Language Integrated Learning (CLIL) in China's higher education system. The analysis identified several key themes, patterns, and challenges that characterize CLIL's current application and its impact on educational practices. The main themes that emerged include Curriculum Integration, Teacher Preparedness, Barriers to Implementation, and Student Engagement. The following sections provide a detailed discussion of each theme, along with the patterns and challenges observed through the data.

4.1. Curriculum Integration

A key theme identified was the challenge of curriculum integration. As shown in Table 1, Curriculum Integration accounts for the highest frequency in the analysis, indicating that balancing both content and language instruction within the existing curriculum remains a significant issue. The primary challenge is aligning students' language proficiency with the academic complexity of the content. Many CLIL programs face difficulties in ensuring that both content and language are taught in a balanced way. There is a recurring pattern where the content is often simplified too much to match students' language levels, or the language demands are set too high for students to effectively

engage with the content. This imbalance can result in suboptimal learning outcomes, with students either gaining language skills or subject knowledge, but rarely both to the same extent.

Table 1. Key Theme Analysis

Theme	Frequency
Curriculum Integration	35
Teacher Preparedness	25
Barriers to Implementation	20
Student Engagement	20

4.2. Teacher Preparedness

Teacher preparedness emerged as another prominent theme. A recurring challenge found in the data was the insufficient training provided to teachers to effectively teach both content and language in a CLIL context. As shown in Figure 1, Teacher Preparedness is a significant challenge, representing 25% of the overall theme distribution. Many educators are well-versed in either language teaching or content knowledge, but few are trained to integrate both. This dual challenge limits the successful delivery of CLIL courses, as teachers continue to apply traditional language teaching methods rather than adapting to a more integrated approach that blends both language and academic subject matter. This lack of preparation among teachers remains a significant barrier to the widespread adoption of CLIL within China's higher education system, highlighting the need for more specialized professional development in CLIL-based teaching practices.

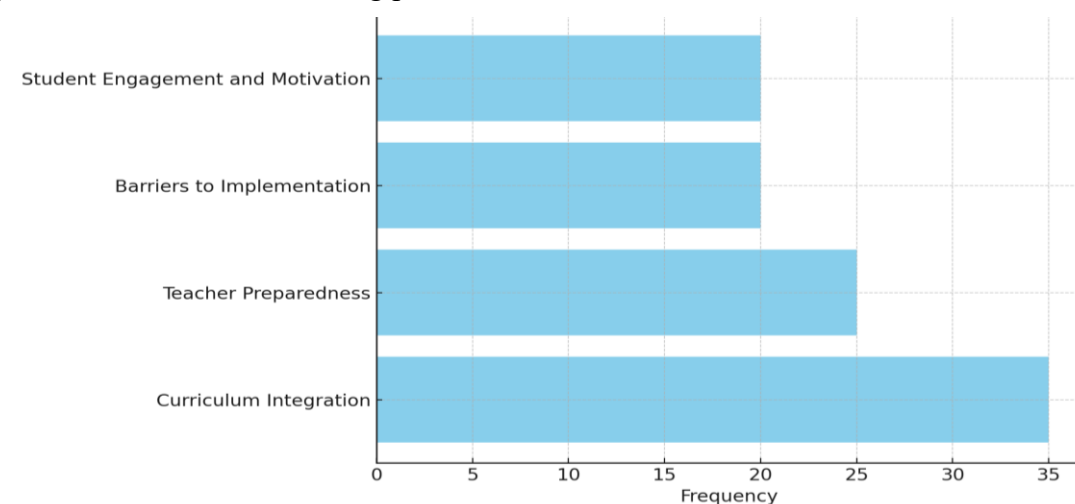


Fig.1 Distribution of Key Themes in CLIL Implementation

4.3. Barriers to Implementation

The barriers to implementation of CLIL were another critical theme identified in the study. One of the most significant barriers is resource limitations, particularly in less-developed regions. Many institutions lack access to the necessary materials and resources that would support the integration of content and language learning. Additionally, resistance to pedagogical change within institutions, especially in more traditional educational settings, has created a barrier to the adoption of CLIL. As shown in Figure 1, Barriers to Implementation account for 20% of the overall theme distribution, indicating that this challenge is important but not as dominant as issues such as Curriculum Integration (which accounts for 35%). As depicted in Figure 2, Resource Constraints (30%) and Institutional Resistance (25%) are the leading challenges in CLIL implementation, underscoring the need for significant institutional support and resource allocation to make CLIL a viable teaching approach.

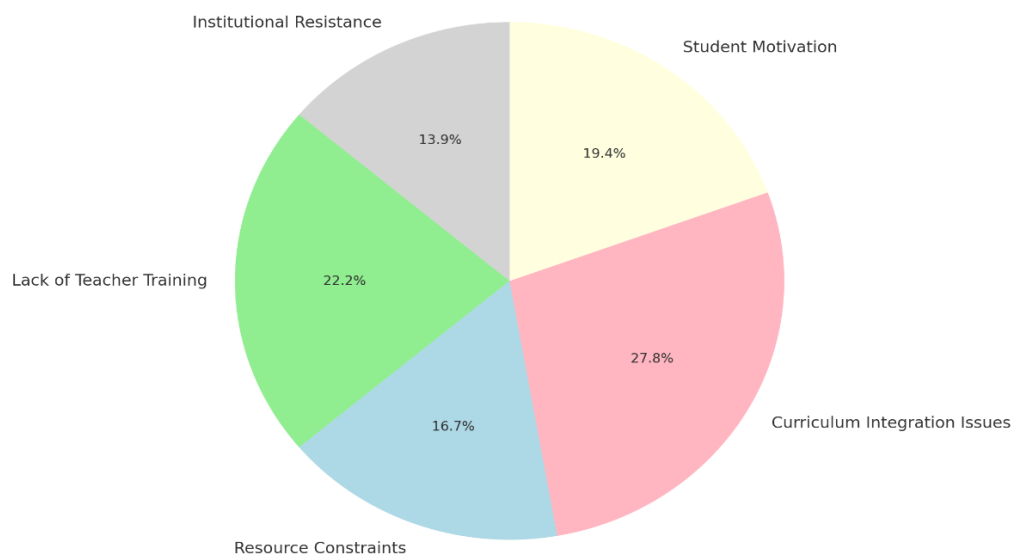


Fig.2 Challenges in CLIL Implementation

4.4. Student Engagement and Motivation

The theme of student engagement and motivation was also a significant finding in the data analysis. On one hand, CLIL has been shown to increase student interest and participation by offering real-world applications of language learning. Many students find that combining content with language learning enhances their academic and professional growth. However, there are challenges in maintaining student motivation over time. As shown in Figure 1, Student Engagement and Motivation accounts for 20% of the overall theme distribution, highlighting its importance. While students often start CLIL courses with high enthusiasm, the dual challenge of mastering both language skills and subject knowledge can lead to frustration. For some students, the complexity of balancing these demands results in reduced motivation and engagement. This is particularly evident in courses where the academic content is challenging, and students struggle to keep up with both the language requirements and subject material.

4.5. Challenges in CLIL Implementation

The challenges in CLIL implementation are multifaceted, as reflected in the distribution of challenges in Figure 2. The most prominent challenges identified include Lack of Teacher Training (40%), Resource Constraints (30%), and Curriculum Integration Issues (50%). These findings indicate that the primary barriers to successful CLIL implementation are related to the availability of well-trained educators, access to adequate resources, and the difficulty in aligning content and language instruction effectively. Additionally, Student Motivation (35%) and Institutional Resistance (25%) also present significant challenges, although they are slightly less prevalent. The data suggests that while many institutions are eager to adopt CLIL, they face substantial hurdles that need to be addressed holistically. Resources and teacher preparedness are critical areas that require attention to ensure the successful adoption of CLIL in China's higher education system.

According to above analysis, this study provides valuable insights into the challenges and opportunities associated with the implementation of CLIL in China's higher education system. Although the approach holds substantial promise in improving both language proficiency and academic knowledge, the implementation is fraught with obstacles. Challenges such as curriculum integration difficulties, inadequate teacher preparedness, limited resources, and institutional resistance must be addressed to harness the full potential of CLIL. By overcoming these barriers, Chinese universities can move toward a more holistic approach to language education, enhancing student learning outcomes and better preparing graduates for a globalized world.

5. Conclusion

This study explored the strategies, challenges, and opportunities involved in implementing Content and Language Integrated Learning (CLIL) in China's higher education system. The findings highlight that, while CLIL holds potential for enhancing both language proficiency and subject-specific knowledge, its implementation faces several challenges. These include difficulties in integrating content and language instruction, inadequate teacher training, resource constraints, and institutional resistance. For CLIL to succeed, universities need to invest in teacher professional development, improve resource availability, and foster institutional support for educational reforms. Future research is needed to examine the long-term effects of CLIL on student outcomes and identify more effective strategies for overcoming implementation barriers.

The study contributes to the theoretical understanding of CLIL by expanding existing frameworks to include its application across various academic disciplines in China. It emphasizes the complexities of balancing content and language instruction and offers insights into the pedagogical adjustments required for successful CLIL implementation. Additionally, this research identifies critical barriers, such as resource limitations and lack of teacher preparedness, that have not been fully explored in prior studies, making this work a valuable addition to the existing literature.

From a managerial perspective, the study provides practical recommendations for higher education institutions aiming to adopt or improve CLIL programs. Universities should focus on equipping teachers with the skills to integrate content and language teaching, ensure adequate resources and technological support, and create an institutional culture that encourages pedagogical innovation. Collaboration among faculty across disciplines is also essential for sharing best practices and improving CLIL outcomes.

Despite its valuable contributions, the study has limitations. It relies on secondary data, which may not capture the full complexity of CLIL implementation. Primary data, such as interviews with educators and students, could provide deeper insights. The research also focuses on general trends across China, leaving out detailed exploration of specific institutions or disciplines. Future research could address these gaps and extend the findings to other regions to provide a more global perspective on CLIL implementation.

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